

## ABSTRACT OF THE DISCLOSURE

To provide a bearing device with a sensor enabling the secure installation of a sensor, having excellent reliability, adoptable to various types  
5 and different sizes of bearing parts, and economically manufacturable, an encoder of a rotating sensor is fitted to the inner member of the bearing part, and the sensor is fitted to the end part of the outer member thereof through a sensor mounting member having a mounting tube fitted to the outer diameter surface of the outer member and a side plate axially positioned in contact with the end face  
10 of the outer member. An outwardly swelling recessed plate of U-shape in cross section which is positioned along the radial direction is fitted to the side plate. The sensor is sandwiched between the recessed plate and an opposite plate. The sensor mounting member is formed of an inner plate and an outer plate overlapped with each other.

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